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#### ITITLEI

METHOD FOR DETECTING A VOICE SECTION USING THE ENERGY AND GAIN OF AN ADAPTIVE CODE BOOK

# [ABSTRACT]

1. The technical filed to which the invention in the claims pertains

The present invention relates to a voice section detection method using the energy and gain of an adaptive code book.

2. The technical problem which the invention tries to solve

In the voice recognition system, the present invention provides a method for detecting a voice section using the energy and gain of an adaptive code book, and a computer-readable medium containing programs recorded thereon for realizing that.

3. The gist of the solution of the invention

The present invention comprises the steps as follows:

- a first step of calculating the energy per frame of multiple frames having a value equal to the energy of a completely decoded voice by using the energy and gain of an adaptive code book;
- a second step of setting up a first threshold and a second threshold on the basis of the energy per frame of multiple frames; and
- a third step of detecting a start point and an end point of a voice block in order to detect a voice block, according to results of comparing the energy per frame of multiple frames with the first and second thresholds.

#### 4. The important use of the invention

The present invention is used for a voice recognition system, etc.

# [Brief Explanation of the Drawings]

Fig. 1 is a configuration example chart of the general voice recognition system.

Figs. 2a and 2b are one preferred embodiment flowchart relating to the voice section detection method using the energy and gain of the adaptive code book according to the present invention.

Fig. 3 is an illustrative chart according to the result detecting a start point and an end point according to the embodiment of the present invention.

### [Explanations of reference numerals for main parts of the drawings]

101: voice section detector 102: feature extractor

103 : recognizer

## [Claims]

- A voice section detection method using the energy and gain of an adaptive code book in the voice recognition system comprising the steps as follows:
  - a first step of calculating the energy per frame of multiple frames having a value equal to the energy of a completely decoded voice by using the energy and gain of an adaptive code book;
  - a second step of setting up a first threshold and a second threshold on the basis of the energy per frame of multiple frames; and
  - a third step of detecting a start point and an end point of a voice block in order to detect a voice block, according to results of comparing the energy per frame of multiple frames with the first and second thresholds.